

## Exhibit A

[REDACTED]

**LEGAL/ADMINISTRATIVE INFORMATION:**

**2. Approximate Date of Conception:**

[illegible]

[REDACTED]

[REDACTED]

## TECHNICAL DESCRIPTION OF THE INVENTION:

### 1. Problem Solved or Feature Provided:

The Image Interchange/Exchange shared archive invention is unique in that images will be stored in a central trusted archive that will then be shared by participating banks to support the elimination of check movement between banks. This process will reduce the internal costs for banks to transport and clear checks throughout the United States. Checks will be cleared more efficiently thus reducing the time to clear and post the check to the account the check is drawn on as well as reducing the cost of the process that is currently in place to support paper handling referred to as Day 1 and Day 2 functions.

### 2. Technical Details:

See figures 1 and 2.

[REDACTED]

[REDACTED]

**SIGNATURES:**  
(Inventors sign and date.)

(Two witnesses sign and date.)

## **THE INVENTION**

### **Image Interchange/Exchange with a Shared Archive**

## **FIELD OF THE INVENTION**

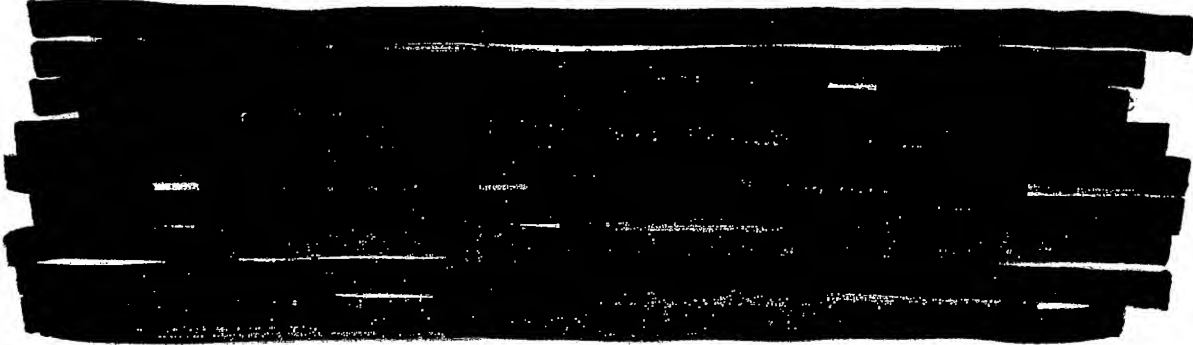

As paper check volumes decrease and processing costs increase, financial institutions must look for more efficient check clearing methodologies. Today, progressive commercial banks view check electronification, electronic presentment and check imaging as a part of a larger business strategy rather than just improving the back office operation. For this transformation to take place, the truncation of the paper check must occur. In order for truncation to occur on a broad basis, it has become evident that images must be acceptable as a replacement for the original paper check. The current pending legislation in the form of the Check Truncation Act (CTA)/Check 21, reflects the need to change the current process. This invention provides a solution that supports the truncation of checks and the Interchange/Exchange of images for participating banks. The current process of transporting paper checks between banks in the form of cash letter transactions are hampered by time zone constraints and specific time limitations related to processing systems, transportation networks and clearing house rules. The invention provides a solution to the immediate problem of transporting paper checks between financial institutions. Its' concepts eliminates presentment and processing delays between banks. The invention includes solutions to processing issues related to check truncation such as reconciliation of electronic check transactions to images and the movement of check images between the participating banks. The solution stores the interchange/exchanged check image once for the participating banks to share rather than recapturing and storing images twice.

## **BACKGROUND OF THE INVENTION**

Financial Institutions have established various associations and processing relationships under a set of mutually agreed to methods, processes and time limitations that are directly related to the exchange of monetary transactions that meets these restrictions and format regulations. These items are generally referred to as MICR debits and credits. These items are in the form of checks, deposits, drafts, adjustments and are presented via a physical document. This practice has been in effect for many years. There is a well-defined and well-known process within the banking system of the United States that supports the exchange of these items. This process is known as the check clearing process or check clearing system. This process begins with the presentation of a MICR document to a business or financial institution. Businesses and financial institutions must present millions of these items each day within their own franchise as well as among other financial institutions. This is accomplished through clearing house arrangements. The presentment of these items is accomplished by shipping what is referred to as cash letters via ground or air

methods of transportation. These shipments must meet rigid time schedules that are not flexible when bad weather, traffic problems or emergency situations impact the ability to prepare and deliver these cash letters to present day transportation pickup and delivery points. The current requirement to present the physical document to capture relative information for settlement and internal processing creates numerous exception processes as a result of late delivery of the items as well as missing items. The bank where the checks are payable must perform numerous processes that require review of the physical item, both front and back. To meet this requirement the physical items must be processed numerous times by machines and people.

Processes prior to this invention are subject to numerous exception processes as a result of paper handling and due to late delivery of work and work not being received.



|  
Archive

### Accelerated Digital Processing of Image Interchange with a Shared

These and other aspects of this invention will become apparent to those skilled in check image capture, operations process after reading of the following description and drawings.

### **SUMMARY OF THE INVENTION**

This invention represents a solution to the difficult task of processing the large volumes of checks (42.5 billion per year) that would be transported to participating Image Interchange/Exchange banks. The object of this invention is to provide financial institutions and their agents with a cost effective methodology of utilizing a shared check image archive with data to support Image

Interchange/Exchange. This solution provides easy access to large numbers of check images, captured data and account data to support financial institutions operational processes. ~~through a system known as ADPAC~~

~~(Accelerated Digital Processing and Clearings).~~

Use is made of multiple applications to combine the capture of electronic check information (MICR data), check images (both front and back), and media formatting and information processing to produce the Image Interchange/Exchange with a shared archive process.

Some of the objectives of this invention are to improve or eliminate: check float, processing deadlines, reduce the physical handling of MICR checks, disaster recovery system deficiencies, check and deposit fraud, statement rendering, uncollected funds, missing items and return item risk.

This invention will transform the interchange of bank checks from a physical paper, ground/air dependent delivery system to a digital image and electronic data file capture, storage and retrieval process. This removes current paper process restrictions related to the handling of the physical check in both capture and delivery of information between the capture bank and the paying bank.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

These and other drawings, objects and features of this invention will be more clearly understood from the descriptions and the accompanying drawings and figures.

Figure 1 is a high level drawing of the Viewpointe Image Interchange/Exchange process. It illustrates the process flow through the numbered sections in the diagram. The capture bank (or processor) converts the paper check into a digitized image. This can be performed by equipment provided by multiple vendors and is formatted according to current industry accepted standards. Images can be captured on low speed or high speed imaging devices. Once captured, the images are controlled by software and hardware components purchased and operated by the capturing institution. Based on schedules controlled by the institution, the images are then transmitted (1) to the Viewpointe archive environment. The data associated with the images is also transmitted to the Viewpointe archive to utilize as indexes for the institution to use for retrieval purposes. The institution also creates electronic cash letters for all of the checks that have been converted to images that will be exchanged between banks. The electronic cash letter is sent to either another institution (3) or to an agent for

delivery to the institution identified as the bank which the check is payable. A copy of the electronic cash letter is sent to Viewpointe (2) to identify and match the check images and associated data that has been sent to Viewpointe by the capture institution.

The bank that receives the electronic cash letter provides cross-reference data to Viewpointe (4) that will enable the bank to retrieve the images based on internally controlled data elements. This data would typically be in addition to the data that was provided by the capturing bank. This data is then appended to the appropriate image (5) that would be used by the bank.

## Viewpointe Archive Services Image Interchange with a Shared Archive

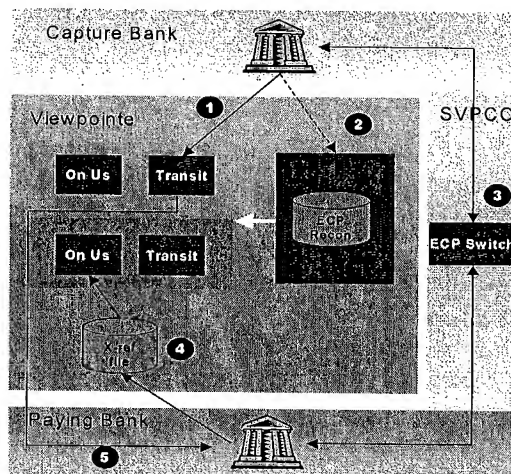
### Image Interchange Pilot

#### Service Offering

The VP model for Image as presentment between VP Check Archive customers, which captures and archives images once and provides access to the image by the capture and paying bank on demand

#### Process Flow

- 1 Captured Images loaded to the transit application archive
- 2 Identify and validate eligible interchange images
- 3 Send Electronic Cash letter
- 4 Build Paying bank Index for interchange Images
- 5 Retrieve Images



Viewpointe Archive Services Confidential

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Figure 1.

**This illustration depicts the Image Interchange/Exchange Image On Demand model (Figure 2).**

Figure 2 represents a flow referred to as the Image On Demand model. The flow starts with the customer writing a paper check that is presented to a bank/institution that will convert the paper check to an image based on image capture devices. The image will represent the paper check and will be used as a representation of the original paper throughout the collection process. The Payin Bank identifies which accounts will be truncated and provides that file detail to Viewpointe to be



delivered to the Capture bank. The Capture Bank will use this initially to electronically or physically sort the items to be truncated. This process will exist until the pending legislation adopted (Check Truncation Act/Check 21) that will authorize banks to truncate checks without an individual or bilateral agreement. The capture bank creates an Electronic Cash Letter (ECL) that is distributed to either a clearing agent designed to support the distribution of these cash letters between banks or directly to the receiving bank. Electronic Cash Letters (ECL) sent to a clearing agent would then be sent to the Paying Bank for further processing. For the Viewpoint model, the capture bank also sends an ECL to Viewpoint for identification of the image that is represented by the ECL transaction. Viewpoint will match the images to the ECL transactions that have been sent by the capture bank. The Paying Bank reconciles the ECL and prepares the transactions for posting to the DDA system. The Paying Bank sends to Viewpoint a transaction file identifying those electronic items received for posting and to be marked and accepted by them. The bank posts the transactions, conducts several fraud and signature verification processes and then performs an Exception Item Pull process for those transactions requiring additional handling. Complete transactions are then ready for any statement generation process that is performed by the bank. Electronic checks that are identified as Return Items are prepared for distribution back to the bank of first deposit or to the return item processor or clearing agent of choice. Transactions that require additional handling are re-processed by the bank. Corrections to the Electronic Cash Letter require a clearing transaction for balancing purposes between banks.

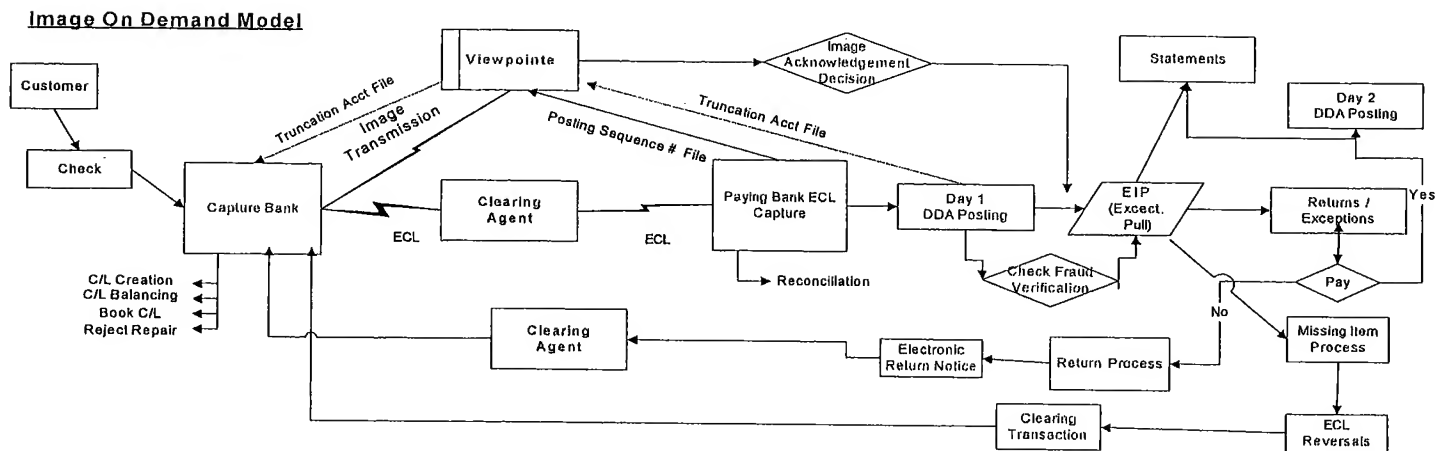


Figure 2

**What is claimed is:**

1. The process of centralizing an image for utilization between a Capture Bank or agent and a Paying Bank or agent is unique within existing processes in the industry.
2. The process of identifying an image for usage by both the Capture Bank or agent and the Paying Bank or agent is unique within the existing processes in the industry.
3. The process of matching the image to the electronic check record for purposes of ensuring the originality, security and control of the original transaction is unique within the existing processes in the industry.
4. The ability to create an ECL (Electronic Cash Letter) through the use of the original Capture Bank indexes is unique within the existing processes in the industry.
5. The process to provide for image exchange or interchange in a centralized environment to facilitate the elimination of the movement of paper checks in the collection process.